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| FITCH EVEN TABIN & FLANNERY 120 SOUTH LASALLE SUITE 1600 CHICAGO, IL 60603 | | | | |
| | | | EXAMINER SALTARELLI, DOMINIC D | |
| | | | ART UNIT 2611 | PAPER NUMBER 8 |

DATE MAILED: 05/27/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/259,984

Applicant(s)

NISHIKAWA ET AL.

Examiner

Dominic D Saltarelli

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 February 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5, 10-22 and 32-56 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5, 10-22, 32-50 and 53-56 is/are rejected.
- 7) ☒ Claim(s) 51 and 52 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. Claims 1-3, 5, 10, 11, 16, 17, 19-25, 27, 32, 33, 38, 39, 41-44, and 53-56 are rejected under 35 U.S.C. 103(a) as being unpatentable over Legall et al. (6,005,565, of record) [Legall] in view of Patterson (5,923,379, of record).

Regarding claims 1, 20, 21, 23, 42, and 43, Legall discloses an apparatus and corresponding method for displaying information on a television comprising:

a circuit that receives wireless television communication signals (fig. 1, receiver 105) from a satellite (col. 2, lines 17-20), the wireless television signals including sensory [broadcasts] and programming data related to the sensory data and provides signals comprising sensory data and the programming data (col. 2, lines 17-23)

a circuit that receives computer network communication signals (fig. 1, system 100 and 110) from the Internet (col. 2 line 28-31)

a circuit that displays the received wireless television communication signals and the received computer network communication signals on the television (100) (col. 2, line 15 and col. 2 lines 38-40), and

a circuit that displays an option palette [tool area] (Figure 2, left hand column of icons) (col. 2, lines 44-47) on the television, the option palette having a plurality of icons that facilitate a user's navigation through the received wireless television communication signals (such as the 'Attractions' and 'EPG' icons).

Legall fails to disclose the circuit that receives wireless television communication signals provides digital signals, and a circuit that receives the digital signals and facilitates communication that is coupled with both the circuit that receives wireless television communication signals and the circuit that receives computer network communication signals, wherein the circuit that facilitates communication facilitates communications between the circuit that receives wireless television communication signals and the circuit that receives computer network communication signals, including facilitating the transfer of commands and the digital signals between the circuit that receives wireless communication signals and the circuit that receives computer network communication signals.

In an analogous art, Patterson discloses providing digital signals from a circuit that receives wireless television communication signals (col. 2, lines 51-67) and a circuit (fig. 3, the bus which interconnects the circuit elements, evidenced by the black arrows) that receives digital signals and facilitates communication that is coupled with both a circuit that receives wireless television communication signals (fig. 3, 12, 14, 16) and a circuit that receives computer network communication signals (fig. 3, 40, 26, 32, 44, 18, 46), wherein the circuit (the bus) that facilitates communication, facilitates communications between the circuit that receives wireless television communication signals and the circuit that receives computer network communication signals (col. 3 line 48 – col. 4 line 16), including facilitating the transfer of commands (user commands [col. 3, lines 54-

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56] invariably include channel change commands, which are routed to the tuner) and the digital signals (from demux 16 to decoder 18, col. 2, lines 51-67) between the circuit that receives wireless communication signals and the circuit that receives computer network communication signals.

It would have been obvious at the time to a person of ordinary skill in the art to modify the apparatus and corresponding method disclosed by Legall to include the circuit that receives wireless television communication signals to provide digital signals, and a circuit that receives the digital signals and facilitates communication that is coupled with both the circuit that receives wireless television communication signals and the circuit that receives computer network communication signals, wherein the circuit that facilitates communication facilitates communications between the circuit that receives wireless television communication signals and the circuit that receives computer network communication signals, including facilitating the transfer of commands and the digital signals between the circuit that receives wireless communication signals and the circuit that receives computer network communication signals, as taught by Patterson. The reasons for doing so is to take advantage of the benefits of digital communication, such as more robust signal integrity, and to provide a physical means by which both command data and digital signal data can be communicated between the circuit that receives wireless television communication signals and the circuit that receives computer network communication signals.

Regarding claims 2, 3, 5, 24, 25, and 27, Legall and Patterson disclose the apparatus and corresponding method of claims 1 and 23, and Legall further discloses a circuit that displays a plurality of filtering options (fig. 3B, search window 375) (col. 3, lines 11-13) on the television, each filtering option representing a way in which the programming data in the received wireless television communication signals is displayed on the television (col. 3, lines 13-19), and the filtering options [power search tool] are displayed by selecting an icon in the option palette [tool area] (col. 2, lines 44-47). These filtering options can comprise a category, such as sports and drama, associated with the programming data (col. 4, lines 3-8).

Regarding claims 4 and 26, Legall and Patterson disclose the apparatus and corresponding method of claims 3 and 25, and further disclose the filtering categories to be movies (Legall, drama category represents movies, col. 4, lines 5-8).

Regarding claims 10, 11, 32, and 33, Legall and Patterson disclose the apparatus and corresponding method of claims 2 and 24, and Legall further discloses filtering the programming data by a predetermined time period associated with the programming data (Figure 3B, items 351 and 352, col. 3,

lines 39-42) in response to the user selecting a filtering option (col. 3, lines 43-45). This predetermined time period is shown in Figure 3B to be an hour.

Regarding claims 16, 17, 38, and 39, Legall and Patterson disclose the apparatus and corresponding method of claims 1 and 23, and Legall further discloses: an on-screen search window (Figure 3B, search window 375) (col. 3, lines 11-13) on the television, the on screen search window for displaying a search command entered by the user (340) (col. 3, lines 28-31), a remote keyboard (115) (col. 2 lines 26-28) in communication with the on-screen search window circuit such that the user can enter the search command in the on-screen search window via the remote keyboard (col. 3, lines 28-31), and a circuit (306) for searching the programming data in accordance with and in response to the entered search command (col. 3, lines 11-17).

Regarding claims 19 and 41, Legall and Patterson disclose the apparatus and corresponding method of claim 1 and 23, and Legall further discloses an apparatus and corresponding method which comprises a circuit that filters the programming data of the wireless television communication signals by channel and a circuit that displays a plurality of channels of programming data on the television (220) (col. 2, lines 40-47), and a circuit that permits the user to select a number of channels displayed on the television (col. 2, lines 57-59) in response

to the user selecting an icon in the option palette (EPG icon from left hand column in Figure 2).

Regarding claims 22 and 44, Legall and Patterson disclose the apparatus and corresponding method of claim 1 and 23, and Legall further discloses a remote controller (115) for facilitating a user's selection of an icon (col. 2, lines 26-28).

Regarding claims 53 and 55, Legall and Patterson disclose the apparatus and corresponding method of claims 1 and 23, and further disclose the circuit that receives the digital signals and facilitates communication (the bus disclosed by Patterson) further receives broadcast data (Legall, fig. 1, from receiver 105) and forwards the broadcast data to the circuit that receives computer network communication signals (Legall, fig. 1, system 100 and 110) and displays it (Legall, fig. 2, col. 2, lines 38-47) on the television (Legall, display 120).

Regarding claim 54, Legall and Patterson disclose the apparatus of claim 1, and further disclose the circuit that receives the digital signals and facilitates communication (Patterson, bus in fig. 3) further receives commands from a user (Patterson, fig. 3, user input device 42 and Legall, col. 2, lines 26-28) and forwards the received commands to the circuit that receives computer network communication signals (Legall, fig. 1, system 100 and 110).

Regarding claim 56, Legall and Patterson disclose the method of claim 55, and further disclose decimating the programming data (Legall, fig. 2, area 205, col. 2, lines 40-42) and blending the decimated portion of the programming data with the computer network communication signals (Legall, col. 2, lines 38-47).

2. Claims 18 and 40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Legall and Patterson in view of Maekawa et al. (5,081,628, of record), [Maekawa].

Regarding claims 18, and 40, Legall and Patterson disclose the apparatus and corresponding method of claims 16 and 38, but fail to specifically disclose the user input device to be a wireless keyboard.

Legall does disclose the user input device may include a keyboard or other input device.

Maekawa discloses a wireless keyboard (3) used in conjunction with a display device (1) and serves to eliminate cable that occupies space and impairs appearance (col. 1, lines 19-21 and col. 1, lines 42-43).

It would have been obvious at the time to modify the apparatus and corresponding method of Legall to make the user input device a wireless keyboard as taught by Maekawa. The reason for doing so would be to eliminate cable that occupies space and impairs appearance.

3. Claims 12, 13, 34, and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Legall and Patterson in view of Schultheiss (6,208,384, of record).

Regarding claims 12, 13, 34, and 35, Legall and Patterson disclose the apparatus and corresponding method of claims 10 and 32, but fail to disclose the filtering option of filtering the programming data by a predetermined time period associated with the programming data is time period being a day or month.

Schultheiss discloses software (col. 8, lines 48-51) which can display TV listings [programming data] which is viewer customizable (col. 8, lines 60-65), most notably regarding how many days of listings to display, allowing viewer customization of the EPG according to interest.

It would have been obvious at the time to modify the apparatus and corresponding method of Legall and Patterson to provide a filtering option that filters the programming data by a predetermined time period of a day or month as taught by Schultheiss. The filtering option taught by Schultheiss is an open-ended form of customization, and thus the reason for doing so would be to provide further customization of displayed programming data (EPG) according to viewer interest.

4. Claims 14, 15, 36, and 37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Legall and Patterson in view of Maze et al. (6,216,264, of record) [Maze].

Regarding claim 14, 15, 36, and 37, Legall disclose the apparatus and corresponding method of claims 1 and 23, and additionally disclose a circuit for entering a search command in response to the user selecting the keys of a keyboard (Figure 3B, text field 340) and a circuit (306) for searching the programming data in accordance with and in response to the entered search command (col. 3, lines 11-17). Legall fail to disclose a circuit for displaying an on-screen keyboard.

Maze discloses a circuit for displaying an on-screen keyboard (Figure 6) and a remote controller for (450R) which enables a user to select the keys of the on-screen keyboard (col. 5, lines 17-25), so that only a remote control is required for entering text searches in a quick and recognizable fashion.

It would have been obvious at the time to modify the apparatus and corresponding method disclosed by Legall and Patterson to further comprise a circuit for displaying an on-screen keyboard for entering a search command through the use of a remote controller as taught by Maze. The reason for doing so would be so that only a remote control is required for entering text searches in a quick and recognizable fashion.

5. Claims 45-48 and 50 are rejected under 35 U.S.C. 103(a) as being unpatentable over Patterson in view of Legall.

Regarding claim 45, Patterson discloses: a DSS processing element (fig. 3, circuit elements 12, 14, 16, 26, 32) (col. 2 line 52 – col. 3 line 14)

communicatively connected to at least one satellite communication channel for receiving digital communication signals, the DSS processing element converting the received digital communication signals into a form that can be displayed on the television, an Internet processing element (fig. 3, circuit elements 40, 26, 30, 18, 44, 46, 22, 24) (col. 3 line 48 – col. 4 line 16) communicatively connected to the Internet for receiving computer network communication signals and converting the received computer network communication signals into a form that can be displayed on the television (col. 3 line 60 – col. 4 line 2), the Internet processing element receiving the converted digital communication signals from the DSS processing element (col. 4, lines 3-16) and displaying the converted digital communication signals and the converted computer network communication signals (col. 3, lines 57-67 and col. 4, lines 12-16).

What Patterson fails to disclose is the received digital communication signals include sensory data and programming data related to the sensory data, the DSS processing element to generate an option palette having a plurality of icons that facilitate a user's navigation through the converted digital communication signals, and for the Internet processing element to display said option palette.

Legall disclose received communication signals include sensory data and programming data related to the sensory data (col. 2, lines 17-20) for generating an electronic program guide (col. 2, lines 20-23), and an option palette (Figure 2, left hand column of icons) for facilitating navigation through received

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communication signals (col. 2, lines 44-47), all in order to provide a means for a user to search through and display via the Internet processing element programming and associated data (col. 1, lines 30-43, fig. 3a, col. 3, lines 11-27).

It would have been obvious at the time to a person of ordinary skill in the art to modify the apparatus disclosed by Patterson to include the received digital communication signals to include sensory data [audio/visual data] and programming data related to the sensory data, and for the DSS processing element to generate an option palette having a plurality of icons that facilitate a user's navigation through the converted digital communication signals (as the DSS processing element includes the graphics controller 32 creates the graphic elements which are forwarded to the microprocessor 26), and for the Internet processing element to display said option palette, as taught by Legall. The reason for doing so would be to provide an easy to use means for the user to quickly search through and display available programming from the received digital communication signals.

Regarding claims 46 and 47, the modified apparatus of Patterson and Legall, as applied above, disclose the apparatus of claim 45, but fail to disclose the DSS processing element generates a plurality of filtering options, each filtering option representing a way in which the programming data in the converted digital communication signals are displayed on the television, wherein a filtering option is filtering the programming data by a category associated with

the programming data, and the Internet processing element receives the plurality of generated filtering options from the DSS processing element and displays the plurality of generated filtering options on the television

Legall further discloses a plurality of filtering options [power search tool] (col. 4, lines 3-7) displayed in response to the user selecting an icon in the option palette [tool area] (col. 2, lines 43-47), each filtering option representing a way in which the programming data in the converted digital communication signals are displayed on the television, wherein a filtering option is filtering the programming data by a category associated with the programming data.

It would have been obvious at the time to further modify the apparatus of Patterson and Legall to have the same DSS processing element which generates the option palette to also generate a plurality of filtering options in response to the user selecting an icon in the option palette, where each filtering option represents a way in which the programming data in the converted digital communication signals are displayed on the television, wherein a filtering option is filtering the programming data by a category associated with the programming data, and to have the Internet processing element receive the plurality of generated filtering options from the DSS processing element and display the plurality of generated filtering options on the television as further taught by Legall. Legall teaches the reason for doing so is to provide instantly accessible search [filtering] options that are selectable, instead of having a user enter or re-enter them manually each time (Legall col. 3, lines 57-60)

Regarding claim 48, the modified apparatus of Patterson and Legall, as applied above, disclose the apparatus of claim 46, but fail to disclose the filtering option is filtering the programming data by a predetermined time period associated with the programming data.

Legall discloses the filtering the programming data by a predetermined time period associated with the programming data (Figure 3B, items 351 and 352, col. 3, lines 39-42) as an additional feature of the power search tool, enhancing its capability and flexibility.

It would have been obvious at the time to further modify the apparatus of Patterson and Legall to provide a filtering option that filters the programming data by a predetermined time period as taught by Legall. The reason for doing so is enhanced flexibility.

Regarding claim 50, the modified apparatus of Patterson and Legall includes a remote controller (115) (Legall col. 2, lines 26-28) for enabling a user to select an icon from the plurality of icons of the option palette.

6. Claim 49 rejected under 35 U.S.C. 103(a) as being unpatentable over Patterson and Legall as applied to claim 45 above, and further in view of Maze.

Regarding claim 49, the modified apparatus of Patterson and Legall discloses the apparatus of claim 45, and additionally discloses the DSS

processing element searches the programming data in the converted digital communication signals for information associated with an entered search command (Legall col. 3, lines 14-16), but fails to disclose the means by which said search command is entered is an on-screen keyboard.

Maze discloses a circuit for displaying an on-screen keyboard (Figure 6) for entering text searches in a quick and recognizable fashion.

It would have been obvious at the time to modify the modified apparatus disclosed by Patterson and Legall to further comprise an on-screen keyboard as taught by Maze for entering text searches in a quick and recognizable fashion.

Response to Arguments

7. Applicant's arguments with respect to claims 1 and 23 have been considered but are moot in view of the new grounds of rejection.

8. Applicant's arguments, see pages 21-22, filed February 19, 2004, with respect to the rejection of claim 45 under 35 USC 103(a) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new grounds of rejection is made in view of Patterson in view of Legall.

The Internet processing element disclosed by Patterson is inclusive of the MPEG decoder 18 (applicant's response, page 21, first paragraph).

Patterson teaches a graphics controller (32) which creates displayed screen graphics, which is included in the DSS processing element. Legall teaches generating a displaying an option palette (figs. 2-3b). Thus the

combination teaches the DSS element generating an option palette (applicant's response, page 21, third paragraph, and page 22, first paragraph)

Allowable Subject Matter

9. Claims 51-52 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
10. The word "circuit" used in claims 1-44 and 53-56 is an extremely broad term. Referring to each circuit as they are disclosed (Internet processing element, DSS processing element, Buffer logic) would limit the claims to the structures associated with each (Buffer logic stores data in addition to transmitting it) and would make the claims more likely to be in condition for allowance.

Conclusion

11. The following are suggested formats for either a Certificate of Mailing or Certificate of Transmission under 37 CFR 1.8(a). The certification may be included with all correspondence concerning this application or proceeding to establish a date of mailing or transmission under 37 CFR 1.8(a). Proper use of this procedure will result in such communication being considered as timely if the established date is within the required period for reply. The Certificate should be signed by the individual actually depositing or transmitting the correspondence or by an individual who, upon information and belief, expects the correspondence to be mailed or transmitted in the normal course of business by another no later than the date indicated.

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Please refer to 37 CFR 1.6(d) and 1.8(a)(2) for filing limitations concerning facsimile transmissions and mailing, respectively.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dominic D Saltarelli whose telephone number is (703) 305-8660. The examiner can normally be reached on M-F 10-7.

If attempts to reach the examiner by telephone are unsuccessful, the primary examiner, Christopher Grant, can be reached at (703) 305-4755. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-4700.

Dominic Saltarelli
Patent Examiner
Art Unit 2611

DS


CHRIS GRANT
PRIMARY EXAMINER